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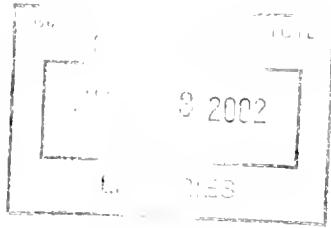
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E-Business Transformation via Alliance Clusters

Fares A. Ghandour*, **Pauliina Girsen-Swartz⁺**, **Heidi M. Grenek^{**}**, and **Edward B. Roberts⁺⁺**

Abstract: The number of firms using alliances as part of their corporate venturing or market entry strategies has surged over the past decade. Three common reasons cited for pursuing alliances are technology convergence, market access and alliance partners' complementary resources. This paper contrasts the alliance strategies of HP and IBM, two major competitors in electronic services (i.e., Internet-based "e-service") businesses. Whereas the HP strategy is to attempt to establish its technology infrastructure as the standard e-services infrastructure on the Internet, IBM aims to position its IBM Global Services, rather than its technology, at the center of this ecosystem.

Keywords: alliances, corporate entrepreneurship, corporate venturing, e-business, Hewlett Packard, IBM

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1 Introduction

Accompanying the explosive growth of the Internet in recent years, one of the fastest growing technology sectors is e-business solutions. Much of this growth has been by innovative start-ups and newly emerging industry leaders. As a result legacy technology companies such as Hewlett Packard (HP) and IBM have quickly formed alliances with these innovators in order to secure their place in the evolving market. Both large firms are leveraging their financial resources, their technical expertise in platforms, hardware and software, and their large sales and service forces so that they are attractive alliance partners for these new firms. But their strategies are different as well as the likely outcomes of those strategies.

This paper first reviews recent studies of alliances across industries, developing frameworks and concepts for analysis. We then apply these concepts to analyze HP's and IBM's e-services alliance strategies. HP and IBM were chosen for comparison because they are both old-line important companies in the traditional hardware-oriented computer industry. Both firms have recently undertaken major efforts to broaden into software and services, especially in relationship to the Internet. In focusing upon their alliance efforts, we examined their alliance activities over the past two years, utilizing various industry and company web sites and general data sources. We complemented that data gathering with personal interviews at both companies to clarify company intentions and activities. Following our independent analyses, we compare the two firm's strategies and draw some conclusions as to the likelihood that these alliances will succeed. The presentation demonstrates how major "head to head" competitors can both adopt and apply a major strategic business development approach, i.e. alliances, and yet employ that strategic approach to very different ends.

2 Overview: Recent studies of alliances

2.1 Trends in alliance activity

The number of firms using alliances as part of their go-to-market strategies has surged over the past decade and was estimated to exceed 20,000 worldwide by the end of 2000 (from a base of 2,000 in 1990 and 10,000 in 1995). [1] More than 20% of all revenue earned by Fortune 1000 companies is derived from alliance activity compared to less than 5% just fifteen years ago. [1] And while different firms define “strategic alliance” differently, the upward trend is still clear, with joint ventures and alliances seen as second in importance only to internal R&D in providing key development technology sources worldwide. [2]

A study by Booz-Allen & Hamilton concludes that alliances have in general generated good returns to the partners. During the 1988-1995 period alliances had an average return on investment of 16%, compared to 12% overall returns for Fortune 500 companies. [1] Moreover, a relatively steep learning effect was observed. Companies with nine or more years of alliance experience earned twice the return on investment (20%) on their alliances compared to the return earned by inexperienced firms (10%). [1] However, not all alliances succeed strategically or financially. Estimates from various sources indicate a success rate of only 50% to 65%. [3]

2.2 Why alliances?

Firms cite three common reasons for pursuing alliances [4]:

- Technology Convergence. Technology convergence and demand for “end-to-end solutions” have prompted companies to seek alliances in order to fill gaps in their product and service offerings.
- Market Access. This is frequently the motivation for cross-border alliances because a local partner is a desired and sometimes a required part of doing business (as in the People’s Republic of China, for example). However, market access may also be critical in domestic

alliances, when by virtue of an alliance a firm becomes “known” in an industry in which it otherwise had little prior reputation. This may be the “ticket” that traditional hardware firms such as HP are seeking when they ally with partners in e-business.

- Complementary Resources. Alliances provide instant access to top-tier talent, technologies, capital, distribution channels, and manufacturing capabilities. “Big bets”, such as on standards, encourage companies to cooperate with others to spread the risk and to strengthen their position by securing “buy-in” of others in the market.

Other common rationales for alliances are listed in Table 1.

[INSERT Table 1: Other rationales for pursuing alliances]

But alliances are fraught with problems as well as these potential benefits. Cultural differences between the firms (sometimes called “impedance mismatch”) are the source of most frequently cited difficulties. Different levels of commitment between the partners, especially as strategic objectives shift over the often long life of an alliance, and loss of individual firm autonomy to its partner due to complex interdependency agreements pose critical issues that need resolution. [5]

Alliances can be “strategic” or “operational” in their goals. Those aimed at: (1) creating an entry opportunity for the firm into a new industry, or (2) targeted at possibly significant growth and/or diversification, or indeed (3) focused upon the very survival of the primary business are seen as “strategic”. Those alliances that are principally attempting to achieve improved performance of the current business are seen as “operational”. They might be aimed at filling out a present product line, or closing a technology gap, or opening new but incremental geographic markets. And they may be “developmental” or “distributional” in mode, the developmental alliances seeking jointly to create a product or business line that has not

previously existed, while the distributional alliances are intended to move one firm's existing products or capabilities through another firm's existing channels to market. [5] All might be important but they differ dramatically in their risk profiles and in their potential for individual gain.

Given the synergies that often exist between multiple alliance partners, why aren't firms pursuing mergers and acquisitions (M&A) as an alternative to alliances? A detailed comparison of alliances versus M&A is beyond the scope of this paper, but briefly, alliances are advantaged to M&A because they (usually) bypass antitrust or other restrictions, have lower capital requirements, involve lower risk, can narrowly define the scope of the relationship, avoid talent drain and are less accountable for shareholders. [6] Furthermore, companies choose alliances to avoid sobering M&A failure rates: 78% of mergers (compared to ~50% of alliances) fall apart within the first three years. [3]

3 E-services at Hewlett Packard

Hewlett Packard is one of the world's largest companies, achieving U.S. \$48.8 billion in revenues in fiscal year 2000. As part of its efforts to redirect its energies HP launched an aggressive e-services campaign in 1999. Since then, HP has introduced several new products, services and technologies for e-services, including its e-speak middleware, which is designed to help companies create and deliver services over the Internet via agent-based interactions. HP's e-services business is currently focused on delivering e-services infrastructure solutions to segments of the market that are large and have significant growth potential, including application service providers, next-generation portals, wireless e-services, digital imaging and electronic publishing, and intelligent networked homes. [7] Based on its financial results HP's e-services

campaign is starting to yield results: its revenue from its services business, which is increasingly focused on e-business opportunities, grew 9% in 1999 and 15% during fiscal year 2000. [8]

3.1 Why is HP in this business?

Since Carly Fiorina joined the company as CEO in 1999, HP has undergone a corporate-wide effort to revitalize the company and its image. HP has promised to “reinvent” itself, to return to its “roots in the Garage” (referring to its founding place in Silicon Valley) and to begin acting like a start-up again. [8] Fiorina has articulated a new corporate strategy for HP based upon her vision that the “pure product era is coming to a close”. Rather, she believes that in the new Net Economy, companies that *integrate* appliances, e-services and infrastructure will be successful. HP’s goal is to gain a competitive advantage in the Net Economy by being at the technological intersection of these three building blocks of e-business. To accomplish this positioning, HP is aggressively developing a presence in e-services while also leveraging its existing market position, customer relationships and installed base.

Since HP was a late entrant to the e-services business, it elected to use partnerships and alliances to gain quick access to the market. It focused on developing infrastructure technologies for e-services (both hardware and software), and used partnerships to gain access to other e-service technologies and products (mainly e-service applications). By partnering with leading e-service players HP has been able to enter and ramp up its e-business very rapidly. Given the significant uncertainty as to the winning technologies and business models on the Internet, HP, like most other firms, has chosen to diversify its “bets” across many platforms and industries by entering into a large number of e-services alliances. HP’s long-term vision is to create “e-services ecosystems with HP at the center”. [9] HP wants to establish its e-services

infrastructure as the dominant standard on the Internet, clearly a strategic goal toward which alliances are seen as key contributors.

4 HP's e-services alliances

We studied seven different HP e-service alliances for this paper. (The Appendix includes a list of the HP and IBM alliances and their descriptions.) Most of the individual alliances are “operational” in the sense that they fill gaps in HP’s e-services technologies or product lines. [5] However, when analyzed as a portfolio, the alliances are “strategic” from HP’s corporate perspective. Due to its late start and lack of previous experience in e-services, alliances have enabled HP quickly to enter and develop its e-services business. Through the alliances HP has gained access to new products, services, technologies and customers.

4.1 Common characteristics among the HP alliances

HP’s e-services alliances share many common characteristics. First, most of its partners (excluding Nokia and Oracle) are relatively small companies that are focused on a specific e-service technology, product or service. Furthermore, these smaller company partnerships are almost exclusively “distributional” alliances. In contrast the Nokia and BEA partnerships are “developmental” alliances, where the partners are seeking jointly to develop new, previously non-existing, technologies. As shown in Table 2, HP typically brings to its alliances infrastructure technology (as well as brand, capital and distribution channels), and the alliance partners typically bring in specific e-service applications.

HP has entered into numerous partnerships since it launched its e-services campaign. In our search we found over twenty HP alliances in e-services since 1999. Six of the seven alliances we chose to study are non-exclusive (the Oracle alliance, which is more focused on cross-selling the two companies’ existing products than on developing new ones, is exclusive). Given the number

and non-exclusivity of the alliances, it is quite common for the parties to an alliance to also ally with the partner's competitors. For example, HP has an alliance with both Ariba and i2, who are direct competitors in the vertical portal market (as well as alliance partners of IBM). The high number of alliances can be explained in part by the high uncertainty in the e-services market. As a result the major players are trying to cover all the possible angles to make sure that their technology will be part of the emerging industry standards.

Many of HP's partnerships were set up to deliver to a specific customer a complete e-service solution that integrates complementary technologies from the alliance participants. Consequently, such partnerships are focused on specific customers and/or industry segments and

[INSERT Table 2: HP's e-services alliances]

seem short-term and transactional in nature. For example, HP's partnership with Ariba combines the two companies' complementary technologies and services to deliver an e-procurement solution for the catalog purchasing business. The Ariba example highlights another interesting feature of HP partnerships. Increasingly the alliances blur the lines between HP and its customers and suppliers. HP actually considers most of its e-services customer relationships "alliances" since in many cases HP gives its infrastructure to the customer for free with the hope that the customer will build new e-service applications on the HP platform. This both delays revenue growth for HP and raises issues as to which firms are truly partners that ought to receive "partnership management" attention and which are purely customers.

Due to its lack of previous track record in e-services HP continues to have difficulties in positioning itself as an Internet innovator compared to IBM and others. Partnerships are a way for HP to gain instant credibility in e-services. HP's strengths in existing businesses (like

servers), and access to capital and sales channels make it a desirable partner for many e-service companies.

4.2 Familiarity Matrix analysis of HP alliances

Several years ago Roberts and Berry [10] introduced the concept of the Familiarity Matrix as a vehicle for assessing the appropriateness of various “new business entry” alternatives such as internal development, alliances, joint ventures, acquisitions, and minority equity investments. The matrix focuses upon the positioning of a proposed business development along the two axes of technology and market familiarity to the company. The firm’s primary current business utilizes its “base technology” on behalf of its “base market”; any potential endeavor may be close to or distant from those bases.

[INSERT Figure 1: Familiarity matrix for HP’s e-service alliances]

We analyzed HP’s e-services alliances using the Familiarity Matrix as shown in Figure 1. In preparing the analysis we assumed that HP’s current “base market” in e-services includes corporations developing e-services solutions either for internal use or for their customers. HP’s “base technologies” were seen as including its internally developed e-services infrastructure technologies (both hardware and software).

We gained the following insights from the Familiarity Matrix analysis:

- Four of the seven alliances that we studied (BEA, Oracle, Ariba and Yahoo) involved a base or familiar market for HP. These alliances targeted mainly corporate customers. In terms of technologies acquired via the alliances, these four alliances involved either “new but somewhat familiar” or “new and unfamiliar” technologies from HP’s perspective. The alliances appear to be mostly operational in nature, with the goal of filling a product or a technology gap.

- The three alliances for which the market factor was new familiar or new unfamiliar to HP (Everypath, Nokia and i2) involved either individual or corporate mobile telecommunications users or online trading communities. These three alliances also helped HP gain access to deploy new familiar or new unfamiliar technologies. Although we did not analyze HP's partners, the ideal situation here would have been the case where the partner was engaged in its own base area of market competence.
- As mentioned earlier HP has used its alliances with other e-service providers to gain rapid entry into the e-services market. Regardless of the level of familiarity with the market and/or technologies involved, HP's preferred way of gaining access to new markets/technologies seems to be alliances, as opposed to acquisitions or venture capital investments. Alliances do not force HP to make long-term more permanent commitments to partners or technologies that might end up being unsuccessful in the future. Finally, as shown on the Familiarity Matrix, none of the HP alliances involves its own current base technologies. It is clear that HP is positioning itself as the preferred provider of e-services infrastructure in these alliances. By forging partnerships across many applications and a large number of players HP's goal is to speed the advancement and adoption of its infrastructure technology.

5 E-services at IBM

Unlike Hewlett Packard, which is a relatively new entrant into Internet-based technologies and services, IBM has participated in the development of the e-business economy from its inception. Innovative technologies, hardware, software, services and global reach have firmly established IBM as a leader guiding the evolution of the e-business “ecosystem” that is transforming business. Today IBM is involved in all aspects of e-business, including incubation of new companies, tools development, web hosting, wireless e-services and outsourcing.

Much of what IBM has learned about e-business comes directly from the company's own experience in transforming itself into one of the world's largest e-businesses. In the year 2000 IBM generated U.S. \$23.3 billion in e-commerce revenue out of its total revenues of U.S. \$88.4 billion. In addition IBM purchased \$43 billion in goods and services over the Web, claiming savings of \$377 million through implementation of e-procurement processes with suppliers. [11]

5.1 Why is IBM in this business?

As the economy migrates away from the "pure product" era cited by HP's Fiorina toward a focus on the delivery of services, IBM has transformed itself heavily into a "solutions provider". Rather than simply sell customers stand-alone products, IBM has instead focused on identifying its customers' "business issues" and then developing integrated solutions to those problems. These "business issues" increasingly concern e-business and, hence, IBM has brought together its broad range of capabilities (including skills in business strategy, hardware, software, customer relationship management, supply chain management, operations and other areas) to develop solutions that enable companies to realize the full potential of e-business.

Given the higher value (and higher price) customers place on integrated solutions, IBM is not alone in its pursuit to become a solutions provider. Firms such as Hewlett Packard, Xerox and others have also started to focus on solutions development. However, IBM, with its rich history in computer technologies, its unparalleled intellectual property portfolio, and the global reach of its sales and service network, is uniquely positioned to deliver integrated e-business solutions to increasingly global customers. Much of this e-business activity flows through the IBM Global Services organization, which signed U.S. \$55 billion in new services contracts worldwide in the year 2000, the world's largest information technology services provider and the fastest growing

part of IBM. [11] Continued development of e-business products and services is clearly the highest priority area of strategic focus for IBM.

As an e-business solutions provider IBM must be able to provide products and services that meet customers' "end to end" needs, both in terms of their value chain and their business lifecycle. By leveraging its core competency in "data handling", IBM would like to "control" every phase in the lifecycle of data, from input via a PDA through management of the data in a DB2 database residing on an IBM mainframe. However, IBM has neither the resources nor the time to deliver every component of a complete solution in-house and therefore seeks industry-leading alliance partners that can provide the parts that are missing. William Etherington, an IBM Senior Vice President, commented, "Our commitment to bring customers e-business solutions does not end at IBM's borders. We're reaching out to combine the industry's best software applications with IBM technologies, services, and knowledge of our customers' business issues to create powerful new solutions that no other IT company can match." [12] In part because of this reliance on partners for elements of its solutions, IBM has emphasized the development of cross-platform solutions. While IBM would obviously prefer that its solutions be deployed using IBM products, it recognizes that for various reasons (including legacy equipment and infrastructures) not every customer will migrate to IBM equipment. Consequently, IBM is positioning its Global Services organization, not necessarily its technology, to be at the center of the "e-services ecosystem".

A second part of IBM's e-services strategy centers on the establishment of open technology standards in the industry. Recognizing the advantage in helping to develop nascent technology standards, IBM has been proactive in entering into alliances with the intent that it can influence which standards emerge.

6 IBM's e-services alliances

We studied eight different IBM e-service alliances for this paper (Table 3), using web and general business sources complemented by interviews with senior members of IBM's corporate strategy office. In 1996 IBM issued its "Business Partner Charter" that signaled IBM's commitment to work with "Business Partners" as the primary way to expand IBM's reach. Since 1996, the percentage of IBM's revenues going through alliances has more than doubled. [13] Unlike some companies IBM does not have a central "alliance group" to initiate and coordinate the firm's alliances. Instead alliances are initiated by both the corporate headquarters and in individual divisions based on business need. For most alliances the initiating party has oversight responsibility. However, if the alliance is "big enough" (in terms of future revenues or in strategic importance), an alliance manager is assigned to coordinate multiple agreements with that partner (such as with the IBM-Cisco partnership we studied). IBM has no "generic" alliance model or hurdle rate, preferring instead to structure each alliance to best meet the business need. Nor does IBM enter into alliances with the intent of "trying out" the company as a precursor to an acquisition.

As was true with our assessment of HP, most of the IBM alliances we studied were "operational" in that no one alliance moved IBM into a new industry, provided significant diversification, or was crucial to the survival of IBM as a going concern. Rather, most of the alliances were undertaken to complement IBM's existing product line and enable IBM to deliver more complete solutions to its customers. Also similar to HP, analysis of the portfolio of alliances does in fact indicate that combined, their goal is clearly the transformation of IBM into a new type of business (namely, to become a services and solutions provider as opposed to a

stand-alone product developer) and as such, the alliances as a whole are “strategic” from the corporate perspective.

6.1 Common characteristics among IBM's alliances

IBM's alliances in e-services have many common characteristics. In seven of the eight alliances studied IBM selected the industry-leading firm as a partner, regardless of firm size. (Mercer is the exception, which while being a well-respected consulting firm is not one of the “big three”.)

[INSERT Table 3: IBM's e-services alliances]

IBM has repeatedly stated that leaders in e-services, each with its unique offerings, must collaborate in order to accelerate the adoption of e-business and Internet technologies. Its alliances conform to this philosophy and do not appear as haphazard as the frequency of alliances must suggest. Rather IBM appears to be carefully placing its bets on the most likely “winners”, rather than ally with small players that it could eventually take over or cut out of the market once it developed its own technology.

Correspondingly, IBM does not appear to be using alliances primarily as a window to new technologies that it would eventually like to develop in house. Both its push for open standards (e.g., its relationship with Nokia) and its shedding of intellectual property (e.g., the Cisco example) indicate that alliances will be a long-term strategy for IBM.

Further evidence of IBM's commitment to its alliances is that the firm will be the primary customer for the output of two of the alliances (Qwest and Ariba/i2) and it has also taken a U.S. \$630M combined equity stake in Ariba and i2.

Consistent with IBM's transformation into a “solutions provider”, IBM has allied with firms that can complement its goal to be a company's preferred supplier of all e-business services. The IBM-customer relationship begins at the inception of the firm (see the Mercer alliance) and

carries through to all aspects of a firm's infrastructure needs (see Qwest, Cisco, and Dell)

Similarly, IBM can participate in a customer's entire value chain from data entry (Nokia) to data management (Siebel, Ariba/i2).

Also consistent with IBM's role as a "solutions provider", five of the alliances studied are best classified as a new form of integrated "Distribution/Development" alliance. In the short term IBM and its partners are merely marrying their separate product offerings and bundling them together for customers ("distributional"). Ultimately, however, the firms will work together to develop new integrated solutions that would not exist without the alliance ("developmental").

Many of the alliances cite the breadth and geographic reach of IBM's Global Services group as one of IBM's primary contributions to the partnership (Table 3). This indicates that IBM has been successful in leveraging one of its key assets to give it competitive advantage in establishing alliances in the "new" economy.

Lastly, none of the IBM alliances we studied appears to be an exclusive agreement. IBM is willing to ally not only with its partner's competitors but also with its own. For example, the Nokia agreement is part of IBM's larger participation in the "Symbian" alliance, which includes Motorola and Ericsson among others.

6.2 Familiarity Matrix analysis of the IBM alliances

We analyzed IBM's e-services strategy using the Familiarity Matrix (see Figure 2). For the analysis we considered IBM's "base technologies" to include its services group, its database software, and its networking and Web hosting expertise. "Base market" was defined as the markets in which IBM was currently participating (including e-business markets).

[INSERT Figure 2: Familiarity matrix for IBM's e-service alliances]

From the IBM alliances Familiarity Matrix, we learned:

- Five of the eight alliances that we studied (Mercer, Qwest, Ariba/i2, Dell, and Cisco) were primarily extensions of IBM's existing technology base to new markets. Unlike HP, which sought to use new technologies in existing markets, IBM's objective seems to be focused on leveraging its existing technology portfolio and finding complementary products that open up new markets via complete solutions offerings.

- According to the Familiarity Matrix IBM's alliance with Nokia might well be quite risky and perhaps should have instead taken the form of a lower stakes venture capital investment.

However, given that IBM is committed to being a player in the total e-services value chain and that wireless communications appears poised to take off in the next few years, IBM did not have the luxury of moving more conservatively in this market/technology. As this industry has increasingly become "winner takes all", IBM needed to stake a claim early to its position in wireless. Note, however, by selecting the industry leader as an alliance partner, IBM effectively mitigated some of the risk that normally accompanies moving so quickly into the "new/unfamiliar" market/technology sector.

7 Comparison of Hewlett Packard and IBM alliance strategies

HP and IBM are both seeking to leverage alliances as a way to develop integrated e-service solutions and become part of the e-business "ecosystem". Both companies have even partnered with some of the same firms (i.e., Nokia, Ariba and i2). But despite these similarities significant differences remain between the alliance strategies of the two firms.

- Both firms want to be at the center of e-business, but they are approaching this objective differently. HP wants to establish its technology infrastructure, e-speak, as the standard e-

services infrastructure on the Internet. Conversely, IBM wants to position its IBM Global Services, rather than its technology, at the center of this domain. As a result IBM is more proactive in entering alliances that are cross-platform and open standards-based.

- While both firms are using alliances to develop “solutions”, HP is using its alliance strategy to fill gaps in its product line, speed acceptance of e-speak, and make up for its late start in e-services. IBM, on the other hand, is using its alliances to enhance (not establish) its existing offerings across the value chain. This difference may reflect IBM’s desire to participate in the whole e-business value chain, while HP appears to be concentrating on specific segments (i.e. e-commerce).
- Similarly, HP’s alliances appear to be more temporary (effective until HP develops its own offerings) and “new technology” focused, while IBM’s are clearly part of a permanent development strategy and a means to access new markets.
- IBM seems more focused on partnering only with industry leaders, while HP has alliances with smaller firms that deliver only specific applications, not a portfolio of offerings.

Potential issues that may undermine the potential success of each firm’s alliances include:

- A lack of focus, poor alliance management and under-allocation of resources to specific alliances may result from the frequency with which IBM and HP are pursuing alliances.
- Coordination of alliance activities with the rest of the parent organization can be especially difficult in e-services, where the speed at which the market evolves is quite different from the speed at which the rest of the organization operates (“impedance matching” issues). This affects the firms’ abilities to leverage their existing businesses in the e-services space.

- No clear “exit strategies” were identified for any of the alliances. This is particularly troublesome for HP, since it tends to enter into more short-term alliances. A corollary problem to this surrounds appropriation rights to intellectual property following the dissolution of the alliance.

Our research suggests that IBM and HP could improve their chances of alliance success by assuring that each firm involved has a good cultural fit, clear alignment of business objectives, and an organizational structure/work process that promotes information sharing, conflict resolution, and accountability.

8 Conclusions

As the economy becomes increasingly focused on the Internet and the possibilities of e-business “old economy” high tech firms have had to reinvent themselves in order to remain viable competitors in the new solutions-based Net Economy. As technological uncertainty has increased and the pace of technological change has accelerated, these firms have increasingly turned to alliances as a tool to remain in touch with the leading edge of technologies and to offer customers complete e-service offerings. By studying the alliance strategies of two of these “old economy” firms, Hewlett Packard and IBM, as well as recent research on alliances in general, we have been able to conclude the following:

- The recent flurry of alliance activity in the e-services arena represents a strategic shift in how the business will operate in the future. HP has signaled that it will continue to use alliances for “catching up” with more nimble competitors who are ahead in the technology race. IBM has signaled its commitment to continued use of alliances via its “Business Partner Charter”, equity stakes in smaller partners, and intellectual property sharing and considers alliances not

as a means of “catching up” but rather as a necessary part of delivering total “solutions” to customers.

- Although different both firms are using deliberate and consistent alliance strategies. At the core of HP’s strategy is the use of alliances as a means of establishing its “e-speak” product as the standard on the Internet to facilitate e-commerce. At the center of IBM’s strategy is its desire to be a solutions provider over its customers’ entire value chain (not just e-commerce) and to have a part in establishing the standards that will govern the next wave of technology development.
- Note that even if the alliances do not succeed individually in their totality they are likely to succeed at the strategic level of repositioning IBM and HP as players in the Net Economy in the minds of customers and other industry participants. Getting this “invitation” to join the “e-business club” may be even more important than the operational success of any of the individual alliances, particularly for HP (IBM is already in the “club”, but is not necessarily viewed as the most proactive member).
- While alliances will deliver value to the firms, with few exceptions, it is unlikely that these alliances will deliver lasting competitive advantage. Most of them are “non-exclusive” and therefore firms will not be able to fully appropriate any source of long term competitive advantage. Competitive advantage in this market is and will remain a function of a firm’s speed and responsiveness to shifts in customers’ demand.
- A primary risk that both HP and IBM must address in order to enhance the probability of success of their alliance strategies is “impedance matching” of the speed at which they traditionally do business versus the speed at which their customers do business. Other issues concern resource over-commitment and the lack of clearly defined exit strategies.

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Appendix: Brief descriptions of the HP and IBM alliances studied

A1 Hewlett Packard

Ariba Technologies, March 1999

Objective: A partnership for business-to-business commerce where HP will use Ariba's procurement software, and the two will create and host a Web site and procurement service for business suppliers and buyers called the Ariba.com Network. HP will provide hardware, application hosting services, operations infrastructure, deployment support, and co-marketing for the site. Partnership marks Ariba's first foray into services. Buyers can view suppliers' catalogs online, but transactions will run on Ariba's operating resource management system (ORMS) software.

BEA Systems, April 1999

Objective: Alliance will provide customers with a complete software infrastructure for developing and integrating robust e-commerce applications that support e-services. The alliance represents a \$100 million commitment from HP and BEA over next three years for development, sales and marketing support of integrated cross-platform products and solutions for enterprise customers. Alliance provides for HP and BEA to jointly staff e-commerce solution centers throughout the world.

i2 Technologies, July 1999

Objective: Alliance will provide an intelligent e-business portal solution for electronics distributors that facilitates timely sharing of information within a trading community. This alliance extends HP's e-services to supply chain management. The portal leverages i2's RHYTHM eXchange Services, a portfolio of applications that allow participants to share crucial trading information, and HP's e-speak technology.

Yahoo, August 1999

Objective: Agreement to help corporations set up portals (Corporate My Yahoo) that will combine customized information and services from the Internet with corporate intranets. The portals will provide corporate employees with a secure single point of access to internal information - like customer records and order tracking - as well as external services such as customized financial news, stock tracking and travel reservations. Corporate My Yahoo combines functionality of Yahoo interface and HP's Internet technology, including e-speak.

Nokia, September 1999

Objective: Joint development and promotion of business-critical mobile Internet solutions for enterprises. This alliance will enable customers to access e-services over the Internet with mobile handheld devices, such as Nokia media phones. Under the agreement HP will resell the Nokia WAP Server software for both HP-UX(1) and Windows NT operating systems worldwide. Also Nokia and HP will work together to optimize the Nokia WAP Server on all HP 9000 and HP NetServer platforms, allowing easier deployment of WAP-based e-service solutions in business-critical environments.

Oracle, September 1999

Objective: Joint development and deployment of Oracle's Web-based enterprise software on the HP platform. Oracle will move its core development platform for all Internet software, including its customer relationship management (CRM) software suite, enterprise resource planning, E-business, Business OnLine and database software, to the HP-UX platform. Oracle also will install HP servers to power its Internet applications internally, with HP servers accounting for up to 50 percent of Oracle's installed base. For its part HP will adopt the sales component of Oracle's CRM software within its Enterprise Computing group, which has a sales force of more than 6,000 people. The companies will link their sales forces through Oracle's Field Sales Automation software, allowing the two organizations to collaborate on sales to CRM customers.

Everypath, April 2000

Objective: Co-development and co-marketing of a new wireless Internet service that will make it easy for companies to deliver personalized e-services to mobile-device users. The new service will allow users of mobile devices, such as smart phones and the Palm VII organizer, to connect at any time to their most important Web services, including e-banking, stock trading and online auctions, and to complete e-commerce transactions directly from the device. HP will integrate Everypath technologies into a hosting environment, providing a turnkey wireless e-services solution that features HP's network services, HP-UX(1) and NT computing systems, and firewall and intrusion protection.

A2 IBM

Siebel Systems, Inc. (I), September 1998

Objective: A development partnership that will bring Siebel's Enterprise Relationship Management (ERM) solutions to IBM's DB2* Universal Database. Part of ongoing set of initiatives between Siebel and IBM.

Cisco, August 1999

Objective: A global alliance composed of a \$2-billion technology agreement, a strategic relationship with IBM Global Services, and the acquisition by Cisco of portions of IBM's networking intellectual property. Because the firms had been competitors, this alliance was investigated (and approved) by the U.S. Department of Justice for anti-competitive effects. Part of ongoing alliance aimed at making IBM and Cisco better "corporate buddies" – approximately one announcement per month.

Dell, September 1999

Objective: Deal makes IBM Global Services a strategic provider of computer-related services (installation, warranty) to Dell customers. Expands the scope and formalizes existing services agreement between the firms. Projected revenue - \$6 billion over seven years. The firms are also competitors - both firms manufacture and sell personal computers and servers. The firms have also signed a \$16 billion technology sharing agreement to give Dell access to IBM's technology.

Nokia, October 1999

Objective: Accelerate the growth of the wireless Internet. The companies will work together to develop enterprise WAP solutions to enable customers to immediately begin extending eBusiness beyond the PC to a variety of mobile devices. Helps establish WAP as de facto standard. Part of larger group of alliances with Symbian licensees. IBM has stated an initiative to drive open standards and make speech a common interface for mobile devices.

Siebel Systems, Inc. (II), October 1999

Objective: A global strategic alliance to integrate Siebel Systems' multi-channel CRM software applications with IBM's e-business capabilities. Part of ongoing set of initiatives between Siebel and IBM that indicate alliance must be working well.

Ariba/i2, March 2000

Objective: Development of industry's first end to end open solutions for B2B eCommerce and collaboration. The integrated solution is expected to automate all business interactions between trading partners, delivering greater cost savings, efficiencies and competitive advantage to global corporations and marketplaces. As part of this effort, IBM is taking a \$630 million combined equity stake in Ariba and i2. It also includes a patent cross-licensing agreement. IBM is the first main customer of the alliance solution.

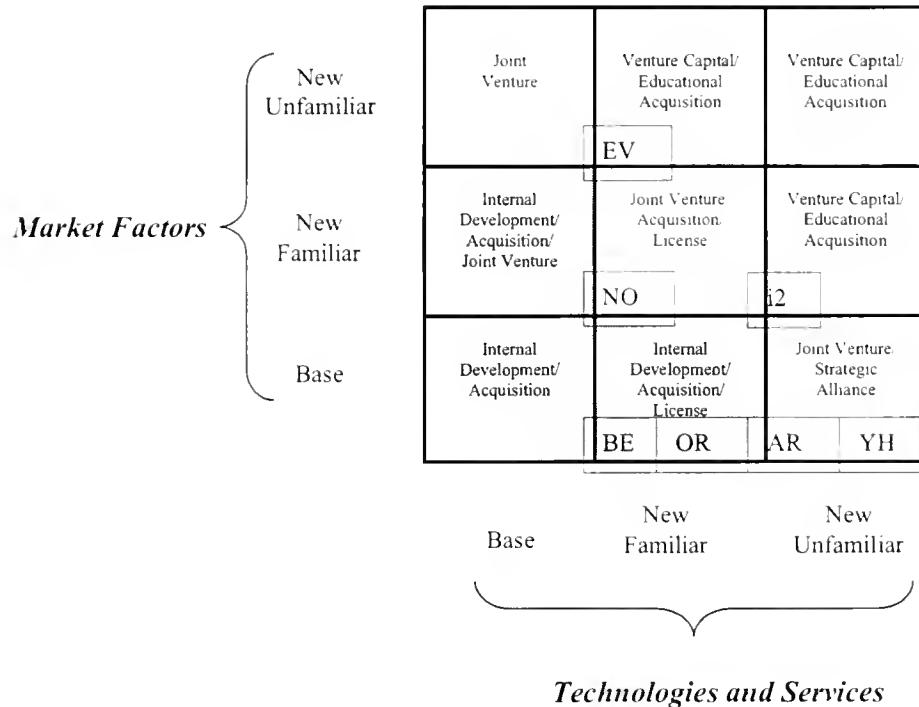
Qwest, March 2000

Objective: A 3-year initiative to deliver next generation e-business services and applications through the creation and deployment of new Qwest CyberCenters. Joint revenues of \$5 billion over seven years. IBM will be "anchor tenant", occupying up to 25% of the CyberCenters.

Mercer Management Consulting, April 2000

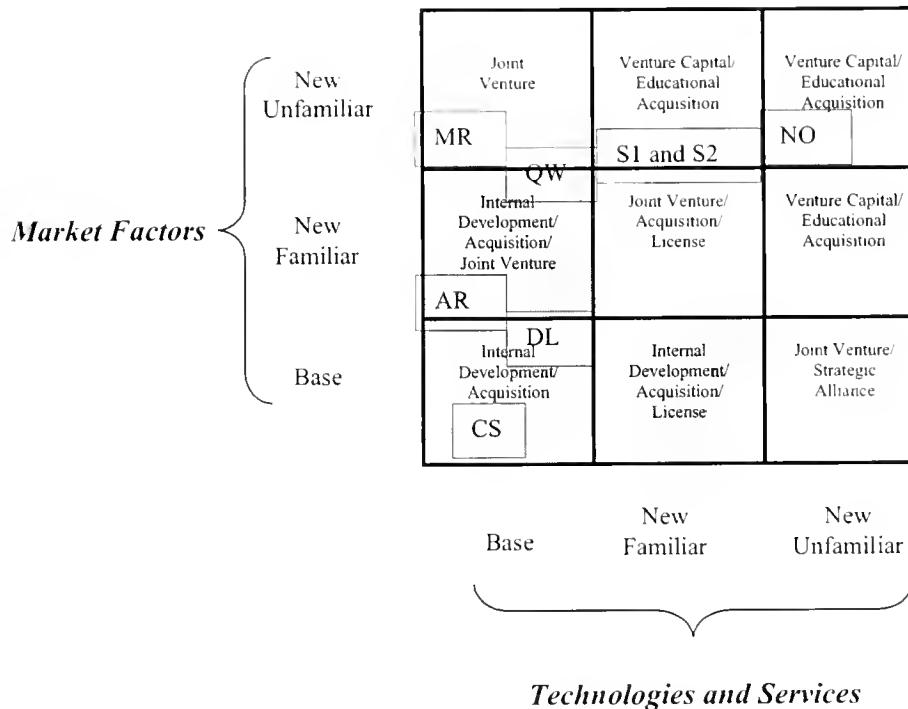
Objective: A global alliance that will help both large and small companies design, incubate, and build new e-businesses. Goal is to incubate 20-30 new e-Commerce companies and assist startup firms from the initial planning stage through financing, recruiting, and technology implementation. Similar to a new venture fund.

Figure 1: Familiarity matrix for HP's e-service alliances



Explanation of symbols used: AR – Ariba, BE – BEA, EV – Everypath, i2 – i2 Technologies, NO – Nokia, OR – Oracle, YH – Yahoo

Figure 2: Familiarity matrix for IBM's e-service alliances



Explanation of symbols used: AR – Ariba/i2, CS – Cisco, DL – Dell, MR – Mercer, NO – Nokia, S1 – Siebel I, S2 – Siebel II, QW – Qwest

Table 1: Other rationales for pursuing alliances [4]

Reason	Description
Follow the Herd	There is so much uncertainty and turbulence in high-tech markets that no one knows where the market is heading. Companies that do not want to miss out on market trends seek alliances (many times conflicting ones) in order to hedge their bets.
Prestige	Many firms, especially start-ups, use alliances as a way to achieve recognition visibility in today's cluttered market. Having a partnership with an industry leader earns a firm credibility in the market.
Speed	Speed to market or "first-mover-advantage" is important in the new economy. Companies with enough resources to develop capabilities in-house still choose alliances as a means to accelerate development.
Regulatory Barriers	Alliances can be used as a way to sidestep regulatory barriers, such as anti-trust rules, that prevent a merger between firms that want to cooperate.
"Trial Marriages"	In light of high merger failure rates, companies sometimes pursue alliances to learn more about the other party before committing for the longer term.

Table 2: HP's e-services alliances

Alliance (launch date)	HP's contribution	Partner's contribution	End Result: alliance provides ...	Exclusive?	Distribution/Development Alliance
Aruba (Mar '99)	Hardware systems, application hosting services, operations infrastructure, deployment support, co-marketing	Procurement software "ORMS"	Procurement web site/service for business suppliers and buyers for a range of products from office supplies to travel	NO	Distribution
BEA (Apr '99)	Hardware systems, operations infrastructure, consulting	Application integration and e-commerce solutions	Complete software infrastructure for developing and integrating robust e-commerce applications that support e-services	NO	Development
Everypath (Apr '00)	Hardware systems, application hosting services, network management services, firewall and intrusion protection software	Mobile application services	Wireless Internet service that makes it easy for companies to deliver personalized e-services to mobile device users	NO	Distribution
i2 Technologies (Jul '99)	Hardware systems, application hosting services, operations infrastructure, deployment support, co-marketing	Supply chain management application "Rhythm"	Internet portal for electronics distributors and other industries where trading partners can store, retrieve, and share critical supply-chain information	NO	Distribution
Nokia (Sep '99)	Hardware systems, co-marketing	WAP server software, co-marketing	Business critical mobile Internet solutions for enterprises	NO	Development
Oracle (Sep '99)	Hardware, co-marketing, sales leads	Web-based enterprise software (including customer relationship management software), co-marketing, sales leads	Integrated web-based enterprise software and service solutions	YES	Distribution
Yahoo (Aug '99)	HP's Internet technologies (including e-speak portal services, behavior-based profiling and personalization technology)	Yahoo's web interface	Corporate portals that meld customized information from the Internet with corporate intranets.	NO	Distribution

Table 3: IBM's e-services alliances

Alliance (launch date)	IBM's contribution	Partner's contribution	End Result: alliance provides ...	Exclusive?	Distribution/Development alliance
Ariba/i2 (Mar '00)	E-business experience, IT, W, S/W, services, e-procurement expertise, global sales force, IP, web-hosting, consulting, supply chain expertise, use of alliance output as a customer as well as partner, equity investment in both firms	Ariba: industry-leading B2B e-commerce platform and Ariba network commerce services i2: industry-leading procurement and supply chain management software	Development of industry's first end to end open solution for B2B e-commerce and collaboration. The integrated solution is expected to automate all business interactions between trading partners, delivering cost savings, efficiencies etc.	NO	Distribution (of each firm's individual products) and Development (of integrated solution)
Cisco (Aug '99)	Transfer of 200 networking patents, strength in servers, S/W and technology for e-businesses, experience in open standards-based application development, access to IBM Global Services	Industry expert in networking, technology portfolio of end to end network solutions	Leverage of Cisco products and IBM services, transfer of IP to Cisco, joint development of offerings to assure transition of IBM customers to Cisco, jointly developed networking solutions, e-business technologies and services	NO	Development (of integrated solutions)
Dell (Sept '99)	Largest provider of IT services, scale, highly regarded services capabilities	Leading direct computer-systems company, award-winning products, its own services and the services of existing global partners (Unisys, GetronicsWang)	Deal makes IBM Global Services a strategic provider of computer-related services to Dell customers (including e-services). IBM gains increased service contracts, Dell gains increased global services reach, greater customer choice, and greater uptime for customers.	NO	Distribution
Mercer Management Consulting (Apr '00)	Intellectual capital, skills, services, and experience in e-business. Will provide technology-related services	Intellectual capital, skills, services, and experience in e-business. Will provide strategic planning services	Incubator for e-businesses of both large and small companies. In addition to standard incubator services, the alliance will all identify sources of VC, and provide rapid implementation services and ongoing infrastructure support.	NO	Distribution (of each firm's individual products) and Development (of integrated solution)
Nokia (Oct '99)	"Expertise in the enterprise"	Leadership in wireless, WAP, knowledge of network operator industry	Nokia WAP server S/W distributed on IBM PC servers and other platforms. Firms will also collaborate on other wireless technologies and applications development. For IBM: opportunity to establish foothold in wireless. For Nokia: help in establishing WAP as de facto open standard	NO	Distribution (initially, followed by co-development of enterprise WAP solutions)
Siebel Systems (I) (Sept '98)	Industry's first multimedia relational database (DB2 Universal Database)	Industry-leading integrated Enterprise Relationship Management (ERM) S/W	Siebel applications optimized for IBM's database platform and hardware, cross-selling and marketing, development of competency centers to speed deployment.	NO	Distribution (of each firm's individual products) and Development (of

		networked-based solution	Integrated solution
Siebel Systems (II) (Oct '99)	Industry expertise and relationships, DB2, server H/W and S/W, global sales presence	Industry-leading Customer Relationship Management (CRM) S/W Integration of Siebel CRM S/W with IBM H/W and S/W. S/W optimized for IBM H/W, cross-selling and marketing, IBM sales will "push" networked-based solution	NO Distribution (of each firm's individual products) and Development (of integrated solution)
Qwest (Mar '00)	Industry-best IT, consulting and services, global leader in Web server management, experience in managing complex websites, large install base of customers that can be migrated to CyberCenters, will build, operate, and be primary occupant of CyberCenters	High-performance broadband Internet network connectivity, industry-leading IP networking capabilities 3-year initiative to deliver next generation e-business services via 28 new Qwest CyberCenters (Internet data centers). Widest spectrum of e-business services "under one roof". Expanded web hosting services for IBM customers, larger user base for Qwest network.	NO Distribution (of each firm's individual products) and Development (of integrated solution)

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